

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A method of providing access to services across a computer network, comprising the step of:
generating an authentication, authorization and access request by a requesting network access device through which, upon a successful authentication and authorization of an end user device to the computer network, the end user device can obtain access to network resources, said authentication, authorization and access request comprising a requesting network access device description and a plurality of service requests indicative of computer services for which the requesting network access device requests provisioning;
~~wherein the requesting network access device description includes one or more of: a requesting network access device vendor, a requesting network access device type and a requesting network access device version;~~
wherein the authentication, authorization and access request is a RADIUS packet ~~comprising Vendor Specific Attribute (VSA) blocks, in which the requesting network access device description is stored; and~~
forwarding, to an authentication, authorization and access-control server, said authentication, authorization and access request for authentication and authorization of the end user device to the computer network, and for reconfiguring the authentication, authorization and access-control server by storing a dependence between the authentication, authorization and access request and the requesting network access device;
wherein the authentication, authorization and access-control server is automatically reconfigured in real time based on the forwarded authentication, authorization and access request and one or more of the requests from one or more other access devices that are attached to the computer network and services that are required by the one or more other access devices;
wherein the method is performed by one or more processors.

2. (Currently Amended) A method according to Claim 1 in which the service requests are defined by information contained within ~~the~~ Vendor Specific Attribute (VSA) blocks in the said packet.
3. (Previously Presented) A method according to Claim 2 in which each said block contains a requesting network access device-type identifier and a service-request identifier.
4. (Original) A method according to Claim 2 in which the packet is a RADIUS-compliant authentication request packet.
5. (Cancelled)
6. (Original) A method according to Claim 1 in which the service requests include a request for a particular service level.
7. (Original) A method according to Claim 1 in which a policy is applied to the access request to determine whether access will be allowed, and if so for what services.
8. (Previously Presented) A method according to Claim 1 in which said network resources are provisioned in dependence upon the access request.
9. (Original) A method according to Claim 1 in which the steps of receiving and applying are performed by an access-control server or an Authentication, Authorization and Audit (AAA) server.
10. (Original) A method according to Claim 9 in which the access-control server uses the access request to select among multiple services that are specified for a particular device.
11. – 12. (Cancelled)

13. (Currently Amended) A network device, comprising:
- one or more processors;
 - a network interface capable of being coupled to a requesting network access device and a computer network and for sending access requests to the network ~~access requests,~~
~~a processor;~~ and
 - a computer-readable storage medium having one or more stored sequences of instructions which, when executed, cause the processor to perform the steps of:
 - generating an authentication, authorization and access request by the requesting network access device through which, upon a successful authentication and authorization of an end user device to the computer network, the end user device can obtain access to network resources for forwarding via the network interface, said authentication, authorization and access request comprising a requesting network access device description and a plurality of service requests indicative of computer services for which the requesting network access device requests provisioning;
 - ~~wherein the requesting network access device description includes one or more of: a requesting network access device vendor, a requesting network access device type and a requesting network access device;~~
 - wherein the authentication, authorization and access request is a RADIUS packet comprising Vendor Specific Attribute (VSA) blocks, in which the requesting ~~network access device description is stored; and~~
 - forwarding, to an authentication, authorization and access-control server, said authentication, authorization and access request for authentication and authorization of the end user device to the computer network, and for reconfiguring the authentication, authorization and access-control server by storing a dependence between the authentication, authorization and access request and the requesting network access device;
 - wherein the authentication, authorization and access-control server is automatically reconfigured in real time based on the forwarded authentication, authorization and access request and one or more of the requests from one or more other access

devices that are attached to the computer network and services that are required by the one or more other access devices.

14. (Currently Amended) A network device according to Claim 13 in which the service requests are defined by information contained within ~~the~~ Vendor Specific Attribute (VSA) blocks in this said packet.
15. (Previously Presented) A network device according to Claim 14 in which each said block contains a requesting network access device-type identifier and a service-request identifier.
16. (Original) A network device according to Claim 14 in which the packet is a RADIUS-compliant authentication request packet.
17. (Canceled)
18. (Original) A network device according to Claim 13 in which the service requests include a request for a particular service level.
19. (Currently Amended) A computer system comprising an access-control server for controlling access to resources on the network when requested by requesting network access devices, the access-control server being arranged:
 - (a) to receive an authentication, authorization and access request by a requesting network access device through which, upon a successful authentication and authorization of an end user device to the computer network, the end user device can obtain access to network resources, said authentication, authorization and access request comprising a requesting network access device description and a plurality of service requests indicative of computer services for which the requesting network access device requests provisioning;

~~wherein the requesting network access device description includes one or more of: a requesting network access device vendor, a requesting network access device type and a requesting network access device version;~~

~~wherein the authentication, authorization and access request is a RADIUS packet comprising Vendor Specific Attribute (VSA) blocks, in which the requesting network access device description is stored; and~~

- (b) to apply a policy to the authentication, authorization and access request to determine whether the end user device can access the computer network, and if so for what services;
- (c) to reconfigure the access control server by storing a dependence between the authentication, authorization and access request and the requesting network access device; wherein the authentication, authorization and access-control server is automatically reconfigured in real time based on the forwarded authentication, authorization and access request and one or more of the requests from one or more other access devices that are attached to the computer network and services that are required by the one or more other access devices.

20. (Original) A computer system according to Claim 19 in which the access control server instructs the provisioning of network resources in dependence upon the access request.

21. (Original) A computer system according to Claim 19 in which the access-control server is an Authentication, Authorization and Audit (AAA) server.

22. (Original) A computer system according to Claim 19 in which the access-control server uses the access request to select among multiple services that are specified for a particular device.

23. (Currently Amended) A computer-readable non-transitory storage medium storing a sequence of instructions which, when executed by one or more processors, causes said processor or processors to perform the steps of:

generating an authentication, authorization and access request by a requesting network access device through which, upon a successful authentication and authorization of an end user device to the computer network, the end user device can obtain access to network resources, said authentication, authorization and access comprising a requesting network access device description and a plurality of service requests indicative of computer services for which the requesting network access device requests provisioning;

~~wherein the requesting network access device description includes one or more of: a requesting network access device vendor, a requesting network access device type and a requesting network access device version;~~

wherein the authentication, authorization and access request is a RADIUS packet ~~comprising Vendor Specific Attribute (VSA) blocks, in which the requesting network access device description is stored; and~~

forwarding, to an authentication, authorization and access-control server, said authentication, authorization and access request for authentication and authorization of the end user device to the computer network, and for reconfiguring the authentication, authorization and access-control server by storing a dependence between the authentication, authorization and access request and the requesting network access device;

wherein the authentication, authorization and access-control server is automatically reconfigured in real time based on the forwarded authentication, authorization and access request and one or more of the requests from one or more other access devices that are attached to the computer network and services that are required by the one or more other access devices.

24. (Currently Amended) A computer-readable storage medium according to Claim 23 in which the service requests are defined by information contained within ~~the~~ Vendor Specific Attribute (VSA) blocks in said packet.

25. (Previously Presented) A computer-readable storage medium according to Claim 24 further including instructions for creating within each said block a requesting network access device-type identifier and a service-request identifier.
26. (Previously Presented) A computer-readable storage medium according to Claim 24 in which the generated packet is a RADIUS-compliant authentication request packet.
27. (Canceled)
28. (Previously Presented) A computer-readable storage medium according to Claim 23, in which service requests include a request for a particular service level.
29. (Previously Presented) A network device as claimed in claim 11 or claim 13 comprising a requesting network access device which controls end-user device access to a network, and which requests services on behalf of one or more said end-user devices.
30. (Previously Presented) A network device as claimed in claim 11 or claim 13 in which said requesting network access device requests services for its own use.